Dr. Bhoomi Shah,
Assistant Professor, Computer Science &
Engineering, School of Technology
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Education

Ph.D(CSE) (2024) – The Maharaja Sayajirao University of Baroda
MCA (2008) – NCCA, Bharuch, VNSGU Surat
B.Sc(CS) (2005) – NCSC Bharuch, VNSGU Surat

Key Skills

Dr. Bhoomi Shah is renowned for providing comprehensive solutions to both industry and governmental organizations, with a focus on the following areas:

1. **Image Processing**: Dr. Bhoomi is a leading expert in image analysis, using advanced machine learning algorithms to deliver precise computer-aided diagnoses. Her work improves outcomes and boosts efficiency across various sectors.
2. **AI, Machine Learning, Deep Learning, and Computer Vision:** Dr. Bhoomi Shah's expertise in machine learning, deep learning, and computer vision empowers her to create innovative solutions that transform industries. Her contributions range from enhancing food image processing to optimizing operations in manufacturing and other sectors.

Background

Joined GSFC University in July 2024

Scholarship and Accomplishments

Dr. Bhoomi Shah is an accomplished researcher with a strong academic background. She earned a Gold Medal in her Master's program and a Silver Medal during her Bachelor's degree. She holds a Doctorate specializing in Deep Learning and Image Processing.

She has over 15 years of teaching experience, having served as a faculty member at prestigious institutions, including Narmada College of Computer Application in Bharuch, The M.S. University of Baroda, before joining GSFC University.

Dr. Bhoomi Shah specializes in teaching advanced subjects such as Python Programming, Deep Learning, Digital Image Processing and Big Data Analytics. She is equally proficient in foundational subjects including Software Engineering, Operating Systems, Data Structure & Algorithm, Programming in C, Programming in C++, Database Management System, and SQL. She has mentored numerous students at both undergraduate and postgraduate levels.

Dr. Bhoomi has an extensive list of publications, with most appearing in high-impact journals of international repute, including those indexed in SCI and Scopus. She holds 2 Granted copyrights, 1 Published patent and is the author of the book titled *Practice Problems in C*.

Publications

1. An Efficient Approach of Brain Tumor Detection & Extraction using BWT with Auto Enhance Technique(2024) "3rd International conference on Machine Learning and Data Engineering (ICMLDE 2024)", Procedia Computer Science, Elsevier (Scopus Indexed)

2. AODV Protocol Suitability for Collision Avoidance Systems (2024) " International Journal of Intelligent Systems and Applications in Engineering" (Scopus Indexed)

3. Traditional Indian Food Classification Using Shallow Convolutional Neural Network (2024) "International Journal of Intelligent Systems and Applications in Engineering" (Scopus Indexed)

4. Important Feature Recognition for Credit Card Recommendation System using Predictive Modelling (2024) "International Journal of Intelligent Systems and Applications in Engineering (Scopus Indexed)"

5. Transparent E-Voting: Paving the Way for the Future of Democracy using block chain (2024) "International Journal of Intelligent Systems and Applications in Engineering" (Scopus Indexed)

6. An efficient intrusion detection framework for mitigating blackhole and sinkhole attacks in healthcare wireless sensor networks (2023) "Computers and Electrical Engineering (**SCIE & Scopus Indexed**)

7. Optimizing intrusion detection in industrial cyber-physical systems through transfer learning approaches (2023) "Computers and Electrical Engineering (**SCIE & Scopus Indexed)**

8. DRCNN - A Generalize Model for Gujarati Food Image Classification(2023) "The Visual Computer" (**SCIE & Scopus Indexed**)

9. Time Complexity in Deep Learning Models (2022) "Procedia Computer Science Journal" (Scopus Indexed)

10. Overview of Deep Learning in Food Image Classification for Dietary Assessment System (2020) "Advances in Intelligent Systems and Computing Series", Proceedings of Sixth ISTA 2020 (Scopus Indexed)

11. An Approach Towards the Fog Computing: Stretching Cloud Computing and Internet of Things (2018) "International Journal of Distributed and Cloud Computing" (UGC Care Journal)